

AMENDMENT TO THE CLAIMS

Applicants selectively amend the claims as follows:

Listing of Claims:

1 1 – 3 (Canceled).

1 4. (Currently Amended) A method, comprising:

2 receiving at a general input/output port for a requesting device one or more a
3 completion packets for a request transaction, the one or more completion packets are for
4 a request transaction addressed to an agent at a completing device and initiated from the
5 general input/output port, at a receiving device, the each completion packet including a
6 completion packet header, the request transaction to include one of a memory read
7 request, an input/output read request and a configuration read request, the general
8 input/output port to implement a communication stack including a physical layer, a data
9 link layer and a transaction layer, the transaction layer to include disassembling the
10 completion packet header included with each completion packet, the completion packet
11 header to include a transaction identification for the request transaction, a completion
12 status of the request transaction and a completer identification for the agent at the
13 completing device; and
14 determining whether ~~the completion status of~~ the completion packet header
15 included with each completion packet includes a completion status that indicates

16 ~~indicating a status other than a successful;~~ and completion of the request transaction,
17 wherein based on an indication of other than a successful completion of the request
18 transaction:
19 storing the completer identification in a first register, ~~if the completion~~
20 ~~status is other than successful.~~
21 indicating in a second register that an unsuccessful completion was
22 received for the request transaction, and
23 using the completer identification in the first register and the indication in
24 the second register to report an error condition associated with the request
25 transaction.
26 ~~wherein the receiving device includes a general input/output~~
27 ~~communication port implementing a communication stack including a transaction~~
28 ~~layer, a data link layer, and a physical layer, the transaction layer to receive the~~
29 ~~completion packet.~~

1 5. (Currently Amended) The method of claim 4, the request transaction to include one of
2 the memory read request, the input/output read request and the configuration read request
3 comprises the request transaction to include the memory read request, wherein multiple
4 completion packets are received for the memory read request, each completion packet to
5 include a portion of the data requested by the memory read request. ~~further including~~
6 ~~indicating in a second register that an unsuccessful completion was received if the~~
7 ~~completion status is other than successful.~~

1 6. (Currently Amended) The method of claim 4 5, the request transaction to include one
2 of the memory read request, the input/output read request and the configuration read
3 request comprises the request transaction to include the configuration read request,
4 wherein one completion packet is received for the configuration read request, further
5 ~~comprising reporting an error condition if the completion status is other than successful.~~

1 7. (Currently Amended) A method, comprising:

2 ~~servicing~~ responding to a request transaction packet from a requesting device at a
3 ~~completer~~ completing device that includes a general input/output port implementing a
4 communication stack including a physical layer, a data link layer and a transaction layer,
5 the request transaction includes one of a memory read request, an input/output read
6 request and a configuration read request, the request transaction associated with a request
7 packet including a requester requester identification and a tag for the request transaction;
8 and

9 determining whether an error condition associated with servicing the request
10 transaction exists, wherein if an error condition exists;

11 the transaction layer implemented at the general input/output port to
12 include assembling ~~transmitting~~ a completion packet for the request transaction,
13 the completion packet to include a completion packet header, the completion
14 packet header to include with a completion status indicating other than successful
15 completion of the request transaction, the requester identification, the tag for the
16 request transaction and a completer identification, from the completer device to
17 ~~the requesting device if an error condition exists;~~

18 transmitting the completion packet to the requesting device from the
19 general input/output port, and
20 storing the requester requester identification and the tag for the request
21 transaction at a location in the completer completing device. device if the error
22 condition exists; and
23 indicating in a register in the completer device tha a completion packet
24 with a completer status other than successful was transmitted if the error
25 condition exists;
26 wherein the completing device includes a general input/output communication
27 port implementing a communication stack including a transaction layer, a data link layer,
28 and a physical layer, the transaction layer to transmit the completion packet.

1 8. (Currently Amended) The method of claim 7, determining whether the error condition
2 associated with serving the request exists comprises determining whether the request
3 transaction is supported at an agent at the completing device for which the request
4 transaction was addressed and if the request transaction is not supported an further
5 comprising storing the tag at a location in the completer device if the error condition
6 exists, wherein the completion status included in the completion packet header is to
7 indicate an unsupported request.

1 9. (Canceled).

1 10. (Currently Amended) The method of claim 7, further comprising using the requester
2 identification and the tag for the request transaction to reporting the an error condition
3 associated with the request transaction. if it exists.

1 11 - 12 (Canceled).

1 13. (Currently Amended) The method of claim 4, wherein the completion header to
2 include [[a]] the completion status comprises the completion status to include information
3 to indicate other than successful may be at least one of an unsupported request, a
4 successful completion, an unsupported request and a completor abort. abort, and an
5 unexpected completion.

1 14. (Currently Amended) The method of claim 7, wherein transmitting [[a]] the
2 completion packet to the requesting device further comprises returning including no data
3 with the completion packet header for the request transaction. a read completion.

1 15. (Currently Amended) The method of claim 7, wherein determining whether the error
2 condition associated with serving the request exists comprises determining whether the
3 request transaction is supported at an agent at the completing device for which the request
4 transaction was addressed and if the request transaction is not supported an error
5 condition exists, wherein the [[a]] completion status included in the completion packet
6 header is to indicate an unsupported request. request a completor abort, and an
7 unexpected completion.

1 16 – 17 (Canceled).

1 18. (Currently Amended) The method of claim 4, wherein the completor identification
2 included in the completion packet header includes a value ~~that corresponds to an~~
3 associated with the agent at the completing device for which ~~that completes~~ the request
4 transaction was addressed, the value to include a bus number, a device number and a
5 function number.

1 19. (Currently Amended) The method of claim 4, wherein the completion packet header
2 further includes:
3 an attribute field including at least one of a priority attribute, a transaction
4 ordering attribute, and a cache coherency attribute; and
5 a virtual channel ID filed to identify a virtual channel associated with ~~of the~~
6 completion packet.

1 20. (Currently Amended) The method of claim 7, wherein the completion identification
2 included in the completion packet header includes ~~a completion header having:~~
3 ~~—— a completor identification including~~ a value ~~that corresponds to the completor~~
4 associated with an agent at the completing device for which the request transaction was
5 addressed, the value to include a bus number, a device number and a function number.
6 agent; and
7 ~~—— the completion status, wherein the completion status includes a value indicating~~
8 ~~the status of the completion packet.~~

1 21. (Currently Amended) The method of claim 20, wherein the completion packet header
2 further includes:
3 an attribute field including at least one of a priority attribute, a transaction
4 ordering attribute, and a cache coherency attribute; and
5 a virtual channel ID filed to identify a virtual channel associated with of the
6 completion packet..

1 22 -24 (Canceled).

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2 25. (New) The method of claim 7, wherein transmitting the completion packet to the
3 requesting device further comprises including no data with the completion packet header
4 for the request transaction.

1 26. (New) A system, comprising:

2 a requesting device to initiate a request transaction from a general input/output
3 port for the requesting device, the request transaction to include one of a memory read
4 request, an input/output read request and a configuration read request, the request
5 transaction associated with a request packet including a requester identification and a
6 tag for the request transaction; and

7 a completing device to include a general input/output port to implement a
8 communication stack including a physical layer, a data link layer and a transaction
9 layer, the completing device to include an agent for which the request transaction was

10 addressed, the completing device to determine whether an error condition associated
11 with servicing the request transaction exists, wherein if an error condition exists:
12 the transaction layer implemented at the completing device's general
13 input/output port assembles a completion packet for the request transaction, the
14 completion packet to include a completion packet header, the completion packet
15 header to include a completion status indicating other than successful completion
16 of the request transaction, the requester identification and the tag for the request
17 transaction,
18 transmitting the completion packet to the requesting device from the
19 general input/output port for the completing device via a communication
20 link, and
21 storing the requester identification and the tag for the request transaction
22 at a location in the completing device.

1 27. (New) The system of claim 26, the completing device to determine whether an error
2 condition associated with servicing the request transaction exists comprises the
3 completing device to determine whether the agent at the completing device for which the
4 request transaction was addressed indicated a completer abort for the request transaction,
5 wherein based on an indication of completer abort for the request transaction, the
6 completion status included in the completion packet header is to indicate completer abort.

1 28. (New) The system of claim 26, wherein transmitting the completion packet to the
2 requesting device further comprises including no data with the completion packet header
3 for the request transaction.

1 29. (New) The system of claim 26, further comprising the completer device using the
2 requester identification and the tag for the request transaction to report an error condition
3 associated with the request transaction.